

[LASER ANNEALING APPARATUS AND METHOD]

Abstract

An apparatus for laser annealing an amorphous silicon film is provided. The amorphous silicon film includes a first region and a second region not overlapped with the first region. The apparatus comprises: a laser beam source module providing a laser beam; a beam splitter, disposed on a path of the laser beam, splitting the laser beam into a first laser beam and a second laser beam; a first photomask disposed on an optical path of the first laser beam and in front of the amorphous silicon film; and a second photomask disposed on an optical path of the second laser beam and in front of the amorphous silicon film; wherein the first laser beam is emitted to the first region, and the second laser beam is emitted to the amorphous silicon film in the second region after the amorphous silicon film in the first region is re-crystallized.